### **REMARKS**

This Application has been carefully reviewed in light of the first Office Action mailed August 17, 2006. To clarify various aspects of inventive subject matter and in some cases to remove unnecessary limitations, Applicant amends Claims 42-45, 47, 49-54, and 56-61. Applicant also introduces new Claims 64-69 and cancels Claims 32-41 without prejudice or disclaimer. In order to advance prosecution of this Application, Applicant has responded to each notation by the Examiner. Applicant submits that all of the pending claims are allowable over the cited references. Applicant respectfully requests reconsideration and favorable action in this case.

## In the Specification

The Examiner objects to the abstract of the disclosure because it does not presently describe the embodiment claimed. Correction is required. See MPEP § 608.01(b). Applicant has amended the abstract.

## In the Drawings

The Examiner objects the drawings because they are informal. Attached herewith are replacement drawings in compliance with 37 CFR 1.121(d). Applicant respectfully submits that no new matter has been added to the Figure.

#### Claim Rejections under 35 U.S.C. § 102

The Examiner rejects Claims 42-44, 46-48, 54-56, 58, and 62-63 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,084,880 issued to Esterowitz et al. ("Esterwitz"). Applicant respectfully traverses these claim rejections for the reasons discussed below.

Applicant provides a reminder that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, "[t]he elements *must* be arranged as

required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131 (emphasis added).

Among other features, amended independent Claim 42 recites, in part, a mid-infrared light source that comprises "a wavelength shifter capable of shifting a shorter optical signal wavelength to a longer optical signal wavelength based at least in part on a Raman effect in a waveguide." Amended independent Claim 42 also recites, in part, that "the longer optical signal wavelength comprises a mid-infrared wavelength" and that "at least a portion of the wavelength shifter comprises a ZBLAN waveguide."

Esterwitz fails to teach or suggest a number of elements of amended Claim 42. For example, nowhere does Esterwitz contemplate a wavelength shifter capable of shifting a shorter optical signal wavelength to a longer optical signal wavelength based at least in part on a Raman effect in a waveguide, where the longer optical signal wavelength comprises a mid-infrared wavelength and at least a portion of the wavelength shifter comprises a ZBLAN waveguide. Consequently, Esterwitz fails to teach or suggest a mid-infrared light source that comprises "a wavelength shifter capable of shifting a shorter optical signal wavelength to a longer optical signal wavelength based at least in part on a Raman effect in a waveguide" where "the longer optical signal wavelength comprises a mid-infrared wavelength" and where "at least a portion of the wavelength shifter comprises a ZBLAN waveguide."

Applicant submits that amended independent Claim 42 is patentable over *Esterwitz* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of amended Claim 42 and all claims depending therefrom.

Applicant submits that independent Claim 64 is patentable over *Esterwitz* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 64 and all claims depending therefrom.

#### Claim Rejections under 35 U.S.C. § 103

The Examiner rejects Claims 57 and 59-61 under 35 U.S.C. § 103(a) as being unpatentable over *Esterwitz*. Claim 45 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Esterwitz* in view of U.S. Patent No. 6,567,431 issued to Tabirian et al. ("*Tabirian*"). Claims 49 and 50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Esterwitz* in view of U.S. Patent No. 6,625,180 issued to Bufetov et al. ("*Bufetov*"). Claims 51-53 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Esterwitz* and *Bufetov* as applied to Claims 49 and 50 above, and further in view of U.S. Patent No. 6,885,683 issued to Fermann et al. ("*Fermann*").

Dependent Claims 45, 49, 50, 51-53, 57, and 59-61 depend from independent Claim 42, which Applicant has shown above to be clearly allowable over *Esterwitz*. *Tabirian*, *Bufetov*, and *Fermann* fail to atone of the deficiencies of *Esterwitz*. Thus, dependent Claims 6, 15, 25, 44, 71-72, and 78 are allowable at least because of they depend from allowable independent claims. Additionally, dependent Claims 4, 15, 23, 33, and 51 recite further patentable distinctions over the references cited by the Examiner. To avoid burdening the record and in view of the clear allowability of independent Claims 1, 16, 42, and 59, Applicant does not specifically discuss these distinctions in this Response. However, Applicant reserves the right to discuss these distinctions in a future Response or on Appeal, if appropriate. Additionally, Applicant does not admit that the proposed combination of *Esterwitz* with *Tabirian*, *Bufetov*, and/or *Fermann* is even possible or that the Examiner has shown the requisite teaching, suggestion, or motivation in the cited references or in the knowledge generally available to one of ordinary skill in the art at the time of invention to combine or modify these references in the manner the Examiner proposes.

For at least these reasons, Applicant respectfully requests reconsideration and allowance of dependent Claims 45, 49, 50, 51-53, 57, and 59-61.

# No Waiver

All of Applicant's arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the *Esterwitz*, *Tabirian*, *Bufetov*, and *Fermann* references. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicant are sufficient to overcome the anticipation and obviousness rejections.

## **CONCLUSION**

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests reconsideration and full allowance of all pending Claims.

Although Applicant believes no fee is due, the Commissioner is hereby authorized to charge any fee or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

If the Examiner feels that a conference would advance prosecution of this Application in any manner, Brian J. Gaffney stands willing to conduct such a telephone interview at the convenience of the Examiner. Mr. Gaffney may be reached at 214-953-6682.

Respectfully submitted,

BAKER BOTTS L.L.R.

Brian J. Gaffney

Reg. No. 51,712

Attorneys for Applicant

Date: Nov. 15, 2006

**Correspondence Address:** 

Customer No.:

05073